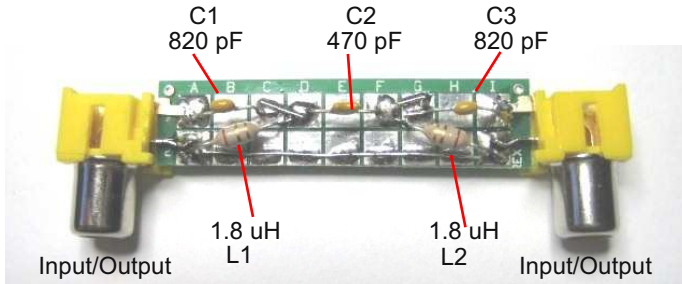


BCI Filter Assembly KotMC

W5USJ Drawing 16 Mar 2012



Filter is Bi-directional

Assembly:

Solder ground (common) and jumper buss wires in place

Solder RCA connectors to end pads as shown*

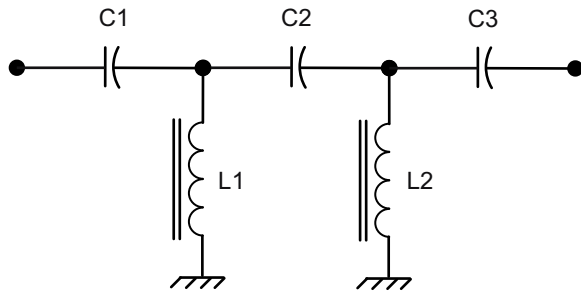
Solder capacitors in place

Solder toroids or chokes in place

Connect to input of transceiver or receiver

*Note: If desired, connect directly to in/out with coax, e. g., RG-174

Do Not use audio cable.



C1 = C3

L1 = L2

L1, L2 = 1;66 uH 20 turns #24 on T37-2

C1, C3 = 820 pF (ceramic 821)

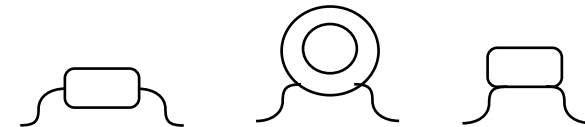
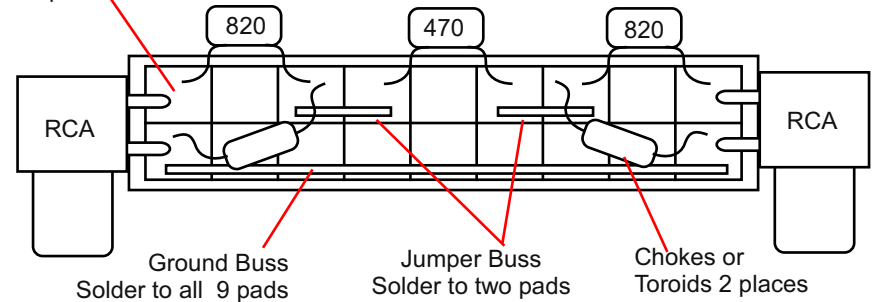
C2 = 470 pF (ceramic 471)

Strip and tin leads on toroids then trim and form to fit

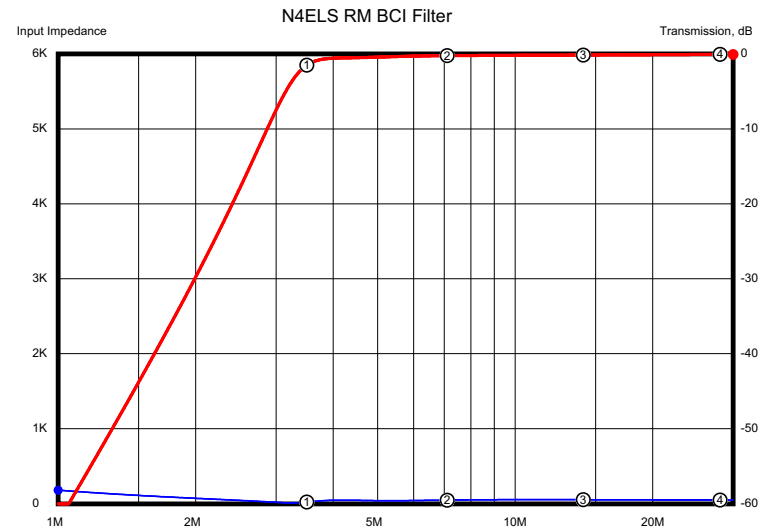
Recommend good quality capacitors, e.g., Kemet C0G 5% ceramics.

Good results can be obtained using 1.5 or 1.8 uH 5% chokes.

Solder leads and terminals to pads 8 places



Form leads to fit center to center across 3 pads



Details of markers:

Frequency	Trans.:	Angle:	Return:	Delay:	VSWR:	Zin:	Zangle:	Real:	Imaginary:
1 3.5M	-1.4973	-111.57	-9.3702	331.4n	2.0303	24.957	-7.2744	24.757	3.1802
2 7.1M	-0.21981	103.79	-34.656	43.78n	1.0377	51.299	1.5273	51.281	-1.3673
3 14.1M	-0.13591	51.145	-20.297	10.18n	1.214	57.409	7.7444	56.885	-7.736
4 28.1M	-0.06233	25.633	-23.855	2.542n	1.1371	52.414	6.8293	52.042	-6.2327